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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,432

12/10/2004

Rene Vire

0512-1245

3928

466

7590

05/08/2006

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EXAMINER

OLSON, LARS A

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/517,432

Applicant(s)

VIRE ET AL.

Examiner

Lars A. Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on March 29, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-8, 10-12 and 14-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. An amendment was received from the applicant on March 29, 2006.
2. Claims 2 and 13 have been canceled.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hightower et al. (US 4,010,619) in view of Buffman et al. (US 5,752,460).

Hightower et al. discloses an underwater device, as shown in Figures 1-9, for unwinding a wire between two moving objects, as shown in Figure 1, said device, defined as Part #20, having a wire, defined as Part #18, that is wound on at least one coil that is received in a reel, defined as Part #202, said reel being arranged between said two moving objects, defined as Parts #10 and 30, where said reel can be separated from said two moving objects, as shown in Figure 1, and comprises a means for stabilizing said reel in said fluid, defined as Parts #204 and 205, as shown in Figure 5. Said device also has a connection mechanism which temporarily connects said reel and one of said moving objects that has been launched, as shown in Figure 2.

Hightower et al., as set forth above, discloses all of the features claimed except for the use of a stabilizing means in the form of a keel that is connected to a fixed plane.

Buffman et al. discloses a submersible towed body, as shown in Figures 1 and 2, that includes a stabilizing means in the form of a keel, defined as Part #134, that is connected to a fixed plane of said towed body, as shown in Figure 1, for the purpose of providing a means for holding said towed body on a fixed course, as described in lines 32-33 of column 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a keel on a towed body, as taught by Buffman et al., in combination with the underwater device as disclosed by Hightower et al. for the purpose of providing a passive stabilizing means instead of a thruster to enhance the stability of an underwater device.

#### ***Allowable Subject Matter***

5. Claims 3-8, 10-12 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments filed on March 29, 2006 regarding claims 1 and 9 have been fully considered but they are not persuasive.

7. The applicant argues that the passive stabilizer means as disclosed by Buffman et al. (US 5,752,46) cannot be combined with the underwater device as disclosed by Hightower et al. (US 4,010,619), as said passive stabilizer means would be unable to control the underwater position of said underwater device.

8. In response to the applicant's argument, Buffman et al. discloses a submergible towed body that includes a passive stabilizing means in the form of a keel that is attachable to a fixed plane of said towed body in order to provide a means for holding said towed body on a fixed course. Hightower et al. discloses an underwater device in the form of a submergible towed body that is nearly identical to that as disclosed by Buffman et al. Thus, it would have been obvious to one of ordinary skill in the art to combine the passive stabilizer means as disclosed by Buffman et al. with the underwater device as disclosed by Hightower et al. for the purpose of providing a submergible towed body with a passive stabilizing means for holding said towed body on a fixed course. Therefore, for the reasons given above, the rejection of claims 1 and 9 is deemed proper and is not withdrawn.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (571) 272-6685.

lo

May 4, 2006

LARS A. OLSON  
PRIMARY EXAMINER

*Lars Olson*  
5/4/06